

# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/691,352 32692	10/18/2000 7590 06/09/2003	Duane M. Pinault	55126USA3A.002	/ 5 3971
3M INNOVATIVE PROPERTIES COMPANY			EXAMINER NORDMEYER, PATRICIA L	
PO BOX 33427 ST. PAUL, MN 55133-3427				
	•-		ART UNIT	PAPER NUMBER
			1772	
		DATE MAILED: 06/09/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.  Office Action Summary  Examiner Patricia L. Nordmeyer  The MAILING DATE of this communication appears on th cover sheet with the correspond nce address Period for Reply					
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r.A					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 24 April 2003.					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>					
4)⊠ Claim(s) 1-19,26-31 and 35-38 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-19,26-31 and 35-38</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) 20-25 and 32-34 are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No.					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 5) Notice of Informal Patent Application (PTO-152) 6) Other:					

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#### **DETAILED ACTION**

### Withdrawn Rejections

- 1. The 35 U.S.C. 112 rejection of claims 8 and 9 in Paper #5, Page 3, Paragraph #8 is withdrawn due to Applicant's explanation in Paper #9.
- 2. The 35 U.S.C. 102 rejection of claims 1, 3, 4, 6, 7, 10 13, 16 18, 26, 27, 30, 31 and 35 in Paper #5, Page 4, Paragraph #12 is withdrawn due to Applicant's argument in Paper #9.
- 3. The 35 U.S.C. 103 rejection of claims 2, 5, 8, 9, 14, 15 and 19 in Paper #5, Pages 5 and 6, Paragraph #14 is withdrawn due to Applicant's argument in Paper #9.
- 4. The 35 U.S.C. 103 rejection of claims 1, 26, 28, 29 and 36 38 in Paper #7, Pages 5 and 6, Paragraph #7 is withdrawn due to Applicant's argument in Paper #9.

#### New Rejections

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 1 – 19, 26, 27, 30, 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei (USPN 5,783,303).

Tsuei discloses an article with a plurality of ceramic granules (Column 11, lines 47 - 51 and Figure 1, #16) bonded to a polymeric film (Column 11, lines 28 - 30 and Figure 1, #11) by a radiation curable (Column 4, lines 41 - 44) aliphatic urethane acrylic copolymer (Column 4, lines 30 - 31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (Column 7, lines 26 - 37). In order to improve adhesion to the coatings, the film may be primed (Column 11, lines 43 - 45). The article may also be formed from a free-standing coating with a layer of adhesive to attach particles to the surface (Column 12, lines 26 - 45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (Column 10, lines 39 - 59). The article may be used as a floor covering (Column 9, lines 59 - 64). The product has white ceramic granules (Column 11, line 52) adhered to a film with transparent adhesive (Column 10, lines 63 - 65) that was tested for flexibility, pliability, (Column 25, lines 14 - 24) and had a tensile elongation of 112% (Column 25, lines 37 - 40).

One of ordinary skill in the art would have recognized that the claimed integrated granule product would be pliable as determined by the flexibility test according to ASTM D-228-00 and ASTM D-882.97 and the aesthetic color of granules are not affected by the cured adhesive since Tsuei teaches a composition made with ceramic granules adhered to a service using an acrylated

aliphatic urethane, which are the same parameters of the claimed invention. Therefore, one of ordinary skill in the art would readily determine the optimum flexibility and color affects depending on the end desired results in the absence of unexpected results.

Tsuei teaches solid ceramic granules instead of ceramic coated granules. The solid granules are performing an equivalent function to the Applicant's ceramic coated granules, unforeseen of any unexpected results from the coated ceramic granules. If unexpected results are present from having the coated granules instead of solid particles, these results need to be presented to show that the granules are not equivalent functions.

7. Claims 1, 8, 26, 28, 29 and 36 – 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (USPN 6,426,309) in view of George et al. (USPN 5,516,573).

Miller et al. discloses a roofing material in the form of shingles (Figures 14 – 17) with a film of protective coating (Column 6, lines 41 – 43 and Figures 4 and 5, #70) bonded to and covering an asphalt based substrate (Column 6, lines 55 – 60 and Figure 4, #76 and 78). The exposed surface of the roofing material is covered with granules (Figures 4 and 5, #72). However, Miller et al. fails to disclose the granules being adhered to the surface of the roofing material being ceramic coated granules.

George et al. teaches ceramic-coated granules (Column 3, lines 8 - 12) on the surface asphalt based substrate (Column 4, lines 20 - 21) of a roofing material (Figure 3, #63 and

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Column 2, lines 46 - 47) where the roofing material includes roof shingles with exposed surfaces (Column 1, line 11 and lines 39 - 42) the purpose of giving protection against exposure from ultraviolet light and improve fire resistance and weather characteristics.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have ceramic granules in Miller et al. in order to protect against exposure from ultraviolet light and improve fire resistance and weather characteristics as taught by George et al.

One of ordinary skill in the art would have recognized that the claimed integrated granule product would exhibit a tensile strength of greater than 50% over a shingle without the integrated granule product according to American Roofing Manufacturers Association Test Index No. 2,126 since Miller et al. teaches ceramic granules adhered to polymeric film using a variety of adhesives including a hot melt adhesive, which are the same parameters of the claimed invention. Therefore, one of ordinary skill in the art would readily determine the optimum tensile strength depending on the end desired results in the absence of unexpected results.

## Response to Arguments

8. Applicant's arguments, see Paper #9, filed April 28, 2003, with respect to the rejection(s) of claim(s) 1 – 19, 26, 27, 30, 31 and 35 under Tsuei have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further

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consideration, a new ground(s) of rejection is made in view of Tsuei. Please see the above

rejection.

9. Applicant's arguments with respect to claims 1, 26, 28, 29 and 36 – 38 have been

considered but are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-

5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate

Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9310 for regular

communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer

Examiner

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HAROLD P

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